

cording to Milde, in all other species. If the emphasis be placed on the tip of the spike, as in various recent treatments of the genus, the place of *E. fontinale* is uncertain; wherefore it appears that this feature has been given undue importance. Whether immature or mature spikes be examined, some will be found with rounded and some with pointed apices. The accompanying photograph shows two spikes on one plant of the type (fig. 1).

Following Milde's classification, *E. fontinale* falls in his "Equiseta monosticha," with the stomata in single rows; within that group, in "*Equiseta hiemalia*," judging by the appressed sheaths. As to real affinity, however, it may not be nearer to *E. hiemale* than to *E. debile* or *E. variegatum*. *E. kansanum* Schaffner, as represented in our Herbarium, is a much larger and stouter plant, with relatively narrow grooves, and stout spikes with rounded apices.

University of California,
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REVIEW

Green Laurels—The Lives and Achievements of the Great Naturalists. By DONALD CULROSS PEATTIE. Pp. xxiii + 368, with 32 figures, mostly full-page portraits; bibliography; index. Simon and Schuster, New York, 1936. \$3.75.

In this book a mind capable of enthusiasm and a skilled pen have disclosed, from a matrix of extensive and accurate knowledge, a series of brilliant personalities. The temptation to compare these biographies with the brilliant work of De Kruif is inescapable. The "microbe hunters" were drawn from a limited field of science and an intensely practical one; and the enthusiasm of the author who celebrates them is earthly, without a trace of poetry. Peattie draws from a wider field, and understands the abnegation of the directly applicable; he thrills to the trees and birds and insects which he sees in Illinois; he can see and make us see the forests of other times and places, and the weird landscapes of Lapland and the Galapagos. This seems the best possible way of introducing to folk in general the explorers of nature.

I cannot know whether the general public will find this work thrilling. It is the elementary student, suffering from the information that "Janssen (or was it Zanssen?) invented the compound microscope in 1590; Hooke discovered the cell in 1665; Malpighi and Grew founded plant anatomy in . . ." who will find the most exhilarating relief.

The professor, true to his training, will look for flaws and find them. Poetical enthusiasm arouses his distrust. In the introduction, a distinction is drawn between field men and laboratory men. This is a real distinction; but to restrict the terms

"naturalist" and "biologist" respectively to the former and the latter seems unsound. Again, in referring to Lamarck, it is enough credit to him that he propounded the theory of evolution. It is perhaps true that the subsidiary theory of the inheritance of acquired characters is not dead; but if my mind rejects it, I cannot think the author does well in seeming to accept it. Incidentally, I despise the terms "Lamarckism" and "Darwinism." They have been used too often without precise definition and in manners derogatory to Lamarck and Darwin. Finally, in the description of the Galapagos, there is a passage which might be taken to imply that marine mammals are primitive. These are among the professor's possible objections: but an interest in men may survive in a specialist in Melanconiales; any device will be welcome to one who thinks young people should know of Linnaeus; and the professor will recommend the book to his students and see that it is available.

The biographies presented are selected primarily by personal appeal. Some who appear are great in every sense, and simple withal, as Linnaeus and Darwin. Bartram and Fabre are unassuming but incapable of remaining unknown. The eminently respectable have sometimes to be admitted, but appeal less; such are Buffon and Goethe. One man forces himself in against distinct personal dislike. A mere minister of state who stood toward Lamarck as Cuvier did might have been passed over with contemptuous mention; but Cuvier was also a validly eminent scientist. Most appealing of all are the pathetic, the unrecognized men of genius, Lamarck, Michaux, the absurd Rafinesque, the embittered Wilson. As a man of broad knowledge, the author cannot help sometimes inserting mere catalogues of names; it is perhaps necessary, in connection with a life of Michaux, that Pursh and Nuttall be mentioned; but their names tend to be distracting. Even the unnamed, the drearily plodding mounters in herbaria, are remembered.—H. F. C.

NOTES AND NEWS

Essays in Geobotany in honor of William Albert Setchell has recently appeared as a publication of the University of California Press. The volume, "honoring one who has contributed much to the advancement of his science and to the life of the University in which he has served for more than forty years," is edited by Thomas Harper Goodspeed. A biographical sketch of Dr. Setchell by T. H. Goodspeed introduces the volume. The frontispiece is a portrait of Dr. Setchell by Peter Van Valkenburgh. The book contains 319 pages and consists of the following essays: the rate of plant migration, by O. W. Arrhenius; the origin of *Crepis* and related genera, with particular reference to distribution and chromosome relationships, by E. B. Babcock; the succession and distribution of Cenozoic floras around the